

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  32343-WO-U	<b>FOR FURTHER ACTION</b> <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No.  PCT/BE 03/00226	International filing date (day/month/year)  18/12/2003	(Earliest) Priority Date (day/month/year)
Applicant  TEKNI-PLEX EUROPE N.V.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

### 1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/BE 03/00226

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B29D7/01 B32B31/30 B32B27/08  
 //B29K23:00, B29K27:12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B29D C08J B32B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 63 224944 A (SUMITOMO BAKELITE CO) 20 September 1988 (1988-09-20) page 2, last paragraph - page 3, paragraph 1 -----	1-6
X	US 2003/008152 A1 (TSAI MINGLIANG LAWRENCE ET AL) 9 January 2003 (2003-01-09) paragraphs '0015!', '0016!', '0019!', '0022!; example 3 -----	1-4 7-10
X	US 2001/008694 A1 (MACKEY JOSEPH EDGAR ET AL) 19 July 2001 (2001-07-19) paragraphs '0018!', '0024!' -----	1-4 7-10
X	US 6 306 503 B1 (TSAI MINGLIANG LAWRENCE) 23 October 2001 (2001-10-23) column 4, paragraph 1 ----- -/-	1-4



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

\* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

12 August 2004

Date of mailing of the international search report

18/08/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Van Nieuwenhuize, O

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/BE 03/00226

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/091019 A (HONEYWELL INT INC) 6 November 2003 (2003-11-06) page 15, paragraph 2 -----	1-4
X	US 6 592 978 B1 (CARTER KEVIN JUNIOR ET AL) 15 July 2003 (2003-07-15) claims 1,7,9 -----	1
X	US 2002/197478 A1 (MUGGLI OLIVIER Y ET AL) 26 December 2002 (2002-12-26) paragraphs '0030!, '0031!, '0040! -----	1
A		7
Y	US 4 370 187 A (KATAGIRI MIKIO ET AL) 25 January 1983 (1983-01-25) figure 5 -----	7-10
Y	DE 203 06 931 U (KKA KLEINWEFERS ANLAGEN GMBH) 10 July 2003 (2003-07-10) figure 3 -----	7
A		11,12
Y	EP 1 287 909 A (FULLER H B LICENSING FINANC) 5 March 2003 (2003-03-05) claim 1; figure 2 -----	7
A	US 6 432 542 B1 (TSAI MINGLIANG LAWRENCE) 13 August 2002 (2002-08-13) claim 1; example 1 -----	1
A	US 5 366 839 A (AOKI NOBUYUKI) 22 November 1994 (1994-11-22) example 3 -----	1
A	EP 1 013 193 A (COLOR PRELUDE INC) 28 June 2000 (2000-06-28) paragraphs '0023!, '0026!; table 5 -----	1
A	WO 93/06159 A (ALLIED SIGNAL INC) 1 April 1993 (1993-04-01) claim 8 -----	1
A	EP 1 364 638 A (BRAUN MEDICAL INC) 26 November 2003 (2003-11-26) table 5 -----	1
A	EP 0 112 406 A (TOPPAN PRINTING CO LTD) 4 July 1984 (1984-07-04) claim 1 -----	6

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/BE 03/00226

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 63224944	A	20-09-1988	JP 1871713 C JP 5086752 B	06-09-1994 14-12-1993
US 2003008152	A1	09-01-2003	AU 6866501 A BR 0111778 A CA 2413278 A1 CN 1447751 T EP 1296829 A1 FI 20022221 A JP 2004501799 T WO 0200435 A1	08-01-2002 13-05-2003 03-01-2002 08-10-2003 02-04-2003 24-01-2003 22-01-2004 03-01-2002
US 2001008694	A1	19-07-2001	US 6238607 B1 US 5874035 A AU 719977 B2 AU 3219697 A BR 9711290 A CA 2259004 A1 DE 69727677 D1 DK 906191 T3 EP 0906191 A1 JP 2000512922 T KR 2000022085 A WO 9748553 A1 US 5945221 A	29-05-2001 23-02-1999 18-05-2000 07-01-1998 28-09-1999 24-12-1997 25-03-2004 24-05-2004 07-04-1999 03-10-2000 25-04-2000 24-12-1997 31-08-1999
US 6306503	B1	23-10-2001	CA 2289575 A1 DE 69817358 D1 DE 69817358 T2 EP 0994776 A2 JP 2002516593 T WO 9856572 A2 AU 7826598 A TW 509626 B	17-12-1998 25-09-2003 24-06-2004 26-04-2000 04-06-2002 17-12-1998 30-12-1998 11-11-2002
WO 03091019	A	06-11-2003	US 2003203141 A1 WO 03091019 A1	30-10-2003 06-11-2003
US 6592978	B1	15-07-2003	US 2003118801 A1 CA 2433908 A1 CA 2466108 A1 WO 03086754 A1 BR 0207448 A CA 2435521 A1 WO 03057483 A1 US 2003188826 A1	26-06-2003 05-10-2003 05-10-2003 23-10-2003 06-04-2004 17-07-2003 17-07-2003 09-10-2003
US 2002197478	A1	26-12-2002	AU 765985 B2 AU 1954700 A BR 0001742 A CA 2299691 A1 CN 1281687 A EP 1033326 A1 JP 2000255642 A SG 85161 A1 TW 514585 B	09-10-2003 07-09-2000 10-10-2000 01-09-2000 31-01-2001 06-09-2000 19-09-2000 19-12-2001 21-12-2002
US 4370187	A	25-01-1983	JP 1403302 C	09-10-1987

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/BE 03/00226

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4370187	A		JP	56089515 A	20-07-1981
			JP	60051438 B	13-11-1985
DE 20306931	U	10-07-2003	DE	20306931 U1	10-07-2003
EP 1287909	A	05-03-2003	DE	19753266 A1	02-06-1999
			AU	4482299 A	27-09-1999
			BR	9815682 A	10-10-2000
			CA	2310605 A1	10-06-1999
			CN	1302234 T	04-07-2001
			DE	29823448 U1	02-06-1999
			DE	29824670 U1	31-01-2002
			DE	29824879 U1	27-03-2003
			WO	9928048 A1	10-06-1999
			EP	1287909 A2	05-03-2003
			EP	1331092 A2	30-07-2003
			EP	1355005 A2	22-10-2003
			EP	1354699 A2	22-10-2003
			EP	1042076 A1	11-10-2000
			JP	2001524385 T	04-12-2001
			NO	20002703 A	26-07-2000
US 6432542	B1	13-08-2002	AT	245526 T	15-08-2003
			AU	1519299 A	31-05-1999
			BR	9815433 A	12-03-2002
			CA	2309188 A1	20-05-1999
			CN	1285777 T	28-02-2001
			DE	69816646 D1	28-08-2003
			DE	69816646 T2	03-06-2004
			DK	1028843 T3	15-09-2003
			EP	1028843 A1	23-08-2000
			ES	2201561 T3	16-03-2004
			FI	20001060 A	21-06-2000
			HU	0004910 A2	28-05-2001
			JP	2001522738 T	20-11-2001
			WO	9924242 A1	20-05-1999
US 5366839	A	22-11-1994	JP	2118335 C	06-12-1996
			JP	4090556 A	24-03-1992
			JP	8012482 B	07-02-1996
			DE	4125401 A1	06-02-1992
EP 1013193	A	28-06-2000	US	2001009175 A1	26-07-2001
			EP	1013193 A2	28-06-2000
WO 9306159	A	01-04-1993	CA	2118925 A1	01-04-1993
			EP	0605558 A1	13-07-1994
			JP	6511272 T	15-12-1994
			WO	9306159 A1	01-04-1993
EP 1364638	A	26-11-2003	EP	1364638 A2	26-11-2003
			EP	1161932 A2	12-12-2001
			AT	259206 T	15-02-2004
			AT	210410 T	15-12-2001
			AU	721838 B2	13-07-2000
			AU	2456497 A	05-12-1997
			BR	9708993 A	02-05-2000
			CA	2253852 A1	20-11-1997

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/BE 03/00226

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
EP 1364638	A	CA 2468377 A1	20-11-1997	
		CA 2468503 A1	20-11-1997	
		DE 69709089 D1	24-01-2002	
		DE 69709089 T2	25-04-2002	
		DE 69727602 D1	18-03-2004	
		DE 69727602 T2	08-07-2004	
		DK 1161932 T3	19-04-2004	
		DK 898466 T3	04-03-2002	
		EP 0898466 A1	03-03-1999	
		ES 2171929 T3	16-09-2002	
		IL 126831 A	06-07-2003	
		JP 2000510728 T	22-08-2000	
		KR 2000011041 A	25-02-2000	
		NO 985266 A	13-01-1999	
		PT 898466 T	31-05-2002	
		RU 2196536 C2	20-01-2003	
		TR 9802314 T2	22-03-1999	
		TW 384221 B	11-03-2000	
		WO 9742897 A1	20-11-1997	
		US 2003047467 A1	13-03-2003	
		US 6203535 B1	20-03-2001	
		US 6165161 A	26-12-2000	
		US 6198106 B1	06-03-2001	
		US 6117123 A	12-09-2000	
		US 2003000632 A1	02-01-2003	
		US 6468377 B1	22-10-2002	
		US 2004068960 A1	15-04-2004	
		US 5944709 A	31-08-1999	
		US 5928213 A	27-07-1999	
		US 5910138 A	08-06-1999	
		ZA 9704106 A	23-02-1998	
EP 0112406	A	04-07-1984	EP 0112406 A1	04-07-1984
			DE 3275711 D1	23-04-1987